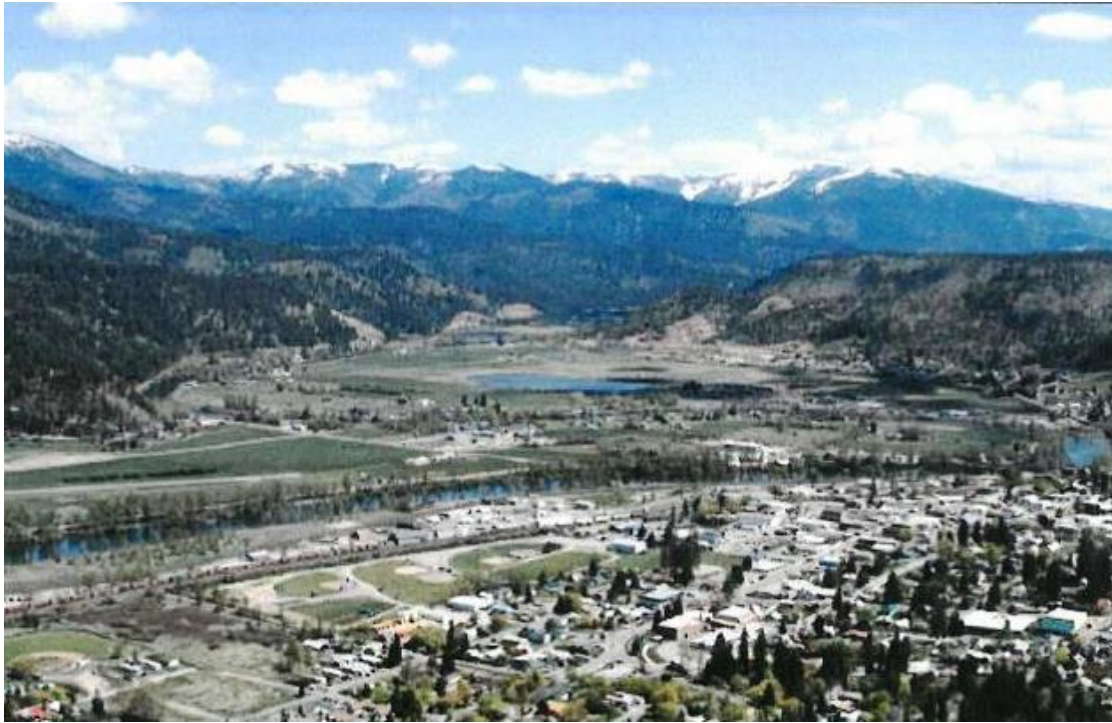


Drinking Water State Revolving Fund Green Project Reserve  
- Interim -



**City of St. Maries Drinking Water System Project**  
**SRF Loan #DW1803 (pop. 2,428)**  
**\$1,100,000**

**Green Project Reserve Technical Memorandum**

**Categorical & Business Case GPR Documentation**

REPLACES 4,500 LINEAL FEET OF LEAD-JOINTED STEEL DISTRIBUTION PIPING WITH NEW 6" & 8" DIAMETER C900 PIPE (Water Efficiency). Categorical GPR per 2.4-1: *Projects that result from a water efficiency related assessment*; Business Case 2.4-4: *Proper water infrastructure management should address where water losses could be occurring...fix them...replacing aging infrastructure.* (\$874,000)

## DISTRIBUTION LINE REPLACEMENT

### Summary

- For DW1803, the City of St. Maries identified the priority replacement of 4,500 linear feet of leaking steel waterline<sup>1</sup>.
- Loan amount = \$1,100,000
- Pipe Replacement portion of loan = 80% (\$874,800) (Design estimate)



### Background

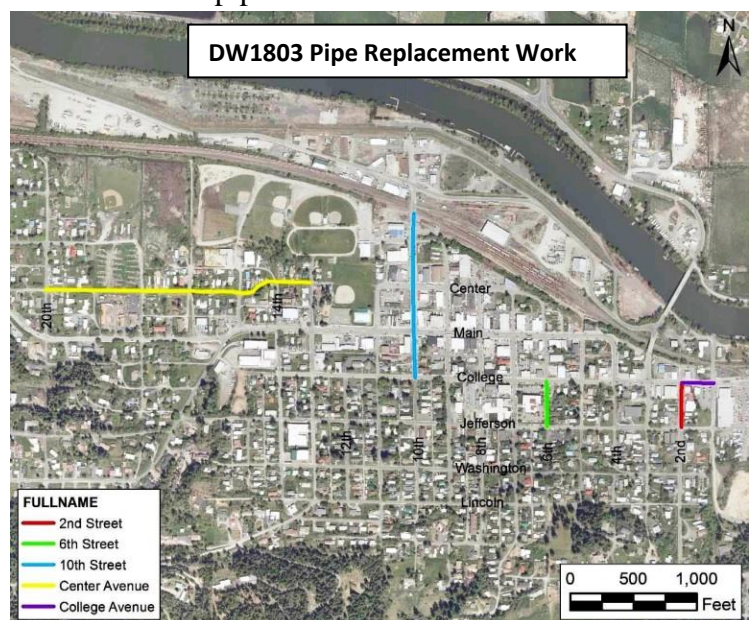
- The soft lead joints in the 6-inch and 8-inch distribution pipe in the City's water system fail on a regular basis. The City must constantly repair these leaks.
- The City's Master Water Plan was updated in 2018 to recommend the priority replacement of 7,870 linear feet of old and leaking 6" and 8" diameter lead-jointed steel distribution pipe. 4,500 LF will be replaced with DW1803 loan funds.
- The new pipe will eliminate water leaks in the distribution system, prevent entry of contaminated water, provide a more secure water supply, and reduce operation and maintenance costs.



### Results

The project will replace existing steel waterline with C900 pipe at these locations:

- 2nd Street (College Ave to Jefferson Ave): Replace 375 linear of 8-inch steel waterline;
- 6th Street (College Ave to Jefferson Ave): Replace 375 linear feet of 8-inch steel waterline;
- 10th Street (Railroad to College Ave): Replace 1,300 feet of 8-inch steel waterline;
- Center Avenue (13th St to 20th St): Replace 2,000 feet of 8-inch steel waterline;
- College Avenue (1st St to 2nd St): Replace 300 feet of 6 and 8-inch steel waterline.



<sup>1</sup> PER 12-21-18, per Jesse Herndon PE, HMM Engineering

## (CON'T) DISTRIBUTION LINE REPLACEMENT

### Conclusion

---

- By replacing the 4,500 linear feet of leaking distribution pipe the City anticipates conserving water and providing a more secure water supply.
- Other benefits include reductions in unnecessary O&M expenditures and eliminating potential health hazards associated with waterborne pathogens entering the water system.
- **GPR Costs:**  
Replacing 4,500 feet of distribution piping = **\$874,000** (Engineering estimate)
- **GPR Justification:**  
The project is Categorically GPR-eligible (Water Efficiency) per Section 2.4-1: *Projects that result from a water efficiency related assessment*; also (Water Efficiency) per a Business Case by 2.4-4: *Proper water infrastructure management should address where water losses could be occurring...fix them...replacing aging infrastructure*<sup>2</sup>.

---

<sup>2</sup> Attachment 2. EPA Guidelines for Determining FY11 Project GPR-Eligibility.